Chapter 502: DIRECT WATERSHEDS OF~~WATERBODIES~~ LAKES MOST AT RISK FROM NEW DEVELOPMENT, AND ~~SENSITIVE OR THREATENED REGIONS OR WATERSHEDS~~ URBAN IMPAIRED STREAMS

SUMMARY: This chapter ~~lists the areas of the state in which the stormwater quality standards described in chapter 500 apply.~~ describes the criteria used to identify the direct watersheds of lakes most at risk from new development and urban impaired streams and lists these waterbodies.

1. **Applicability.** This chapter applies to (A) a project that requires a stormwater permit pursuant to 38 M.R.S.A. § 420-D, and (B) a development that may substantially affect the environment and requires a site location of development (Site Law) permit pursuant to 38 M.R.S.A. §§ 481 - 490.

2. **Definitions**. Unless the context otherwise indicates, definitions of terms in chapter 500 apply to terms used in this chapter. See "Definitions", 06-096 CMR 500.~~2~~3.

3. **Criteria**. The criteria in this section are used to identify the direct watersheds of~~waterbodies~~ lakes most at risk from new ~~development, and sensitive or threatened regions or watersheds~~development and urban impaired streams.

   The criteria apply for both projects requiring a stormwater permit and developments requiring a site location of development permit, unless otherwise specifically stated.

   A. Direct watershed of~~waterbodies~~ a lake most at risk from new development. A lake is considered most at risk from new development if it meets the criteria below. Lakes most at risk from new development are listed in Appendix A of this chapter~~The following types of resources are considered most at risk from new development.~~

   ~~(1) Lakes. A lake that~~if it is

   (~~a~~1)A public water supply; or

   (~~b~~2) Identified by the department as being in violation of class GPA water quality standards or as particularly sensitive to eutrophication based on

   (~~i~~a) Current water quality,

   (~~ii~~b) Potential for internal recycling of phosphorus,

   (~~iii~~c) Potential as a cold water fishery,

   (~~iv~~d) Volume and flushing rate, or

   (~~v~~e)Projected growth rate in the watershed.

   Severely blooming lakes are a subset of lakes most at risk. A severely blooming lake has a history of algal blooms, and the reduction of existing watershed phosphorus sources sufficient to eliminate those algal blooms is expected to be so difficult that the addition of new, incompletely mitigated development sources may prevent successful restoration of the lake.

B. Urban impaired streams. A stream is considered impaired if it fails to meet water quality standards because of effects of stormwater runoff from~~existing~~ developed land. Additional stormwater treatment controls are necessary in urban watersheds of impaired streams because ~~new~~proposed stormwater sources in urban and urbanizing areas contribute to the further degradation of stream water quality. Impaired streams are listed in Appendix B of this rule and include all streams listed under Category 4-A or Category 5-A in the 2004 Integrated Water Quality Monitoring and Assessment Report that have ~~Urban NPS~~urban non-point source (NPS) indicated as a potential source. ~~Additional stormwater treatment controls are necessary in urban watersheds of impaired streams because new stormwater sources in urban and urbanizing areas contribute to the further degradation of stream water quality.~~

~~(2) Rivers, streams or brooks. That portion of a river, stream or brook serving as a public water supply, that is located at or above a public water supply intake, if the municipality (a) has a filtration waiver, or (b) uses slow sand filtration.~~

~~(3) Coastal wetlands. A coastal wetland identified by the department to be either in violation of class SA, SB, or SC water quality standards for marine waters, or particularly sensitive to nutrient, toxic or pathogen contamination based upon one or more of the following factors.~~

~~(a) Current water quality, fish tissue, or sediment data including but not limited to the following.~~

~~(i) Pathogen concentrations in shellfish growing areas exceeding national shellfish sanitation standards subsequent to rain events of two inches or less in a 24 hour period.~~

~~(ii) Dissolved oxygen concentrations at or near levels that result in adverse impacts to the aquatic community.~~

~~(iii) Concentrations in fish tissue or sediments of toxics associated with runoff at levels that pose a significant risk to the ecosystem or public health, or significantly elevated over State or Federal background estimates.~~

~~(b) Potential as a marine fishery as determined by the Department of Marine Resources.~~

~~(c) Physical characteristics (hydrologic or geomorphic) that reduce tidal exchange or in some other way limit assimilative capacity or trap pollutants within the system such as the following.~~

~~(i) Low flushing rate.~~

~~(ii) Long narrow waterbodies.~~

~~(iii) Tide range or tidal volume.~~

~~(iv) Bar (ledge or sand) across main channel.~~

~~(v) Extensive salt marsh or tidal flats.~~

(d) Tidal volume compared to watershed size and runoff volume of direct watershed.

(e) Projected growth rate in the watershed.

B. Sensitive or threatened regions or watersheds. The following types of resource areas are considered sensitive or threatened regions or watersheds. More types of resource areas are considered sensitive or threatened for purposes of a development requiring a site location of development permit, than for a project requiring only a stormwater permit, because a development requiring a site location of development permit may substantially affect the environment. See 38 M.R.S.A. § 482(2).

(1) Lake watersheds. The direct watershed of a lake that is not most at risk from new development.

(2) River, stream or brook watersheds

(a) For purposes of a project requiring a stormwater permit, that portion of the watershed of a river, stream or brook (i) that is not within the watershed of a river, stream or brook most at risk from new development, (ii) that drains to a public water supply, and (iii) that is at the public water supply intake or drains to the river, stream or brook within 2 miles upstream from the intake.

(b) For purposes of a development requiring a site location of development permit, the watershed of any river, stream or brook that is not a river, stream or brook most at risk from new development.

(3) Wetland watersheds. For purposes of a development requiring a site location of development permit, the watershed of (a) a freshwater wetland that contains threatened or endangered species and is not within the watershed of a lake, river, stream or brook most at risk from new development; or (b) a coastal wetland not most at risk from new development.

4. List. The following are waterbodies most at risk from development, and sensitive or threatened regions or watersheds.

The listed areas apply for both projects requiring a stormwater permit and developments requiring a site location of development permit, unless otherwise specifically stated.

A. Direct watersheds of waterbodies most at risk from new development. The following are considered waterbodies most at risk from new development.

(1) Lakes. Lakes listed in Appendix A.

(2) Rivers, streams or brooks. Rivers, streams or brooks listed in Appendix B(1).

(3) Coastal wetlands. Coastal wetlands listed in Appendix C.

B. Sensitive or threatened regions or watersheds. The following are considered sensitive or threatened regions or watersheds.

~~(1) Lake watersheds. Direct watersheds of lakes other than those listed in Appendix A.~~

~~(2) River, stream or brook watersheds~~

~~(a) For purposes of a project requiring a stormwater permit, those portions of the watersheds and channels of rivers, streams or brooks in townships listed in Appendix B(2), that are located at or within 2 miles up stream of a public water supply intake.~~

~~(b) For purposes of a development requiring a site location of development permit, the watersheds of all rivers, streams and brooks not listed as most at risk from new development in Appendix B(1).~~

~~(3) Wetland watersheds. For purposes of a development requiring a site location of development permit, the watersheds of (a) freshwater wetlands containing endangered or threatened species and not within the watershed of a lake, river, stream or brook most at risk from new development, and (b) coastal wetlands not listed as most at risk from new development in Appendix C.~~

~~**5. Further rulemaking**. By July 1, 1998, the commissioner shall present amendments updating this chapter to the board for posting to public hearing. These amendments must, at a minimum, include an updated list of rivers, streams and brooks.~~

AUTHORITY: 38 M.R.S.A. §§ 341-D, 420-D, and 484

EFFECTIVE DATE: December 31, 1997
~~REVISED:~~REPEALED AND REPLACED EFFECTIVE:

APPENDIX A

Lakes Most at Risk from New Development

(x) = Severely Blooming

LAKE	TOWN
ADAMS POND	BOOTHBAY
ADAMS POND	NEWFIELD
ADAMS POND	BRIDGTON
ALLEN POND	GREENE
ANASAGUNTICOOK LAKE	CANTON
ANDERSON POND	AUGUSTA
ANNABESSACOOK LAKE (X)	WINTHROP
BARTLETT POND	WATERBORO
BAUNEG BEG POND	SANFORD
BAY OF NAPLES	NAPLES
BEAVER POND	BRIDGTON
BERRY POND	WINTHROP
BERRY POND	GREENE
BIRCH HARBOR POND	WINTER HARBOR
BLACK POND	SWEDEN
BONNY EAGLE LAKE	BUXTON
BOULTER POND	YORK
BOYD POND	LIMINGTON
BRANCH LAKE	ELLSWORTH
BRANCH POND	CHINA
BRETTUNS POND	LIVERMORE
BUKER POND	LITCHFIELD
BUNGANUT POND	LYMAN
BURNTLAND POND	STONINGTON
CARLTON POND	WINTHROP
CHAFFIN POND	WINDHAM
CHASES POND	YORK
CHICKAWAUKIE POND	ROCKPORT
CHINA LAKE	CHINA
CITY POND	SANDY RIVER PLANTATION
COBBOSSECONTEE LAKE (X)	WINTHROP
COCHNEWAGON LAKE	MONMOUTH
COFFEE POND	CASCO
COLD RAIN POND	NAPLES
CRAWFORD POND	WARREN
CRESCENT POND	RAYMOND
CRYSTAL LAKE	GRAY
CRYSTAL POND	TURNER
DAM POND	AUGUSTA
DAMARISCOTTA LAKE, MIDDLE AND SOUTH BASINS	NOBLEBORO
DAVIS POND	HOLDEN
DEER POND	HOLLIS
DEERING POND	SANFORD
DESERT POND	MOUNT VERNON
DEXTER POND	WINTHROP
DODGE POND	RANGELEY
DUCKPUDDLE POND	WALDOBORO
DUMPLING POND	CASCO
DUTTON POND	CHINA ALBION
EAGLE LAKE	BAR HARBOR
EAST POND	SMITHFIELD
ECHO LAKE	PRESQUE ISLE
ELL POND	SANFORD
ESTES LAKE	SANFORD
ETNA POND	STETSON
FAIRBANKS POND	MANCHESTER
FLOODS POND	OTIS
FOLLY POND	VINALHAVEN
FOREST LAKE	WINDHAM
FRESH POND	NORTH HAVEN
GARDINER POND	WISCASSET
GARLAND POND	GARLAND
GRANNY KENT POND	SHAPLEIGH
GRASSY POND	ROCKPORT
GREAT POND	BELGRADE & ROME
GREAT POND	CAPE ELIZABETH
GREELEY POND	AUGUSTA
GREEN POND	OXFORD
HALEY POND	RANGELEY
HALF MOON POND	ST ALBANS
HALL POND	PARIS
HANCOCK POND	EMBDEN
HATCASE POND	DEDHAM
HERMON POND	HERMON
HIGHLAND LAKE	BRIDGTON
HIGHLAND LAKE	WINDHAM
HOBBS (LT PENNESSE.)	NORWAY
HOGAN POND	OXFORD
HOLBROOK POND	HOLDEN
HOLLAND POND	LIMERICK
HORNE POND	LIMINGTON
HOSMER POND	CAMDEN
HUTCHINSON POND	MANCHESTER
INGALLS POND	BRIDGTON
INGHAM POND	MOUNT VERNON
ISINGLASS POND	LIMINGTON
JACOB BUCK POND	BUCKSPORT
JIMMIE (JAMIES) POND	MANCHESTER
JIMMY POND	LITCHFIELD
JORDAN POND	MOUNT DESERT
KENNEBUNK POND	LYMAN
KEZAR POND	WINTHROP
KILLICK POND	HOLLIS
KNICKERBOCKER POND	BOOTHBAY
KNIGHT POND	SOUTH BERWICK
LAKE AUBURN	AUBURN
LAKE GEORGE	SKOWHEGAN
LAKE WOOD	BAR HARBOR
LILLY POND	ROCKPORT
LILY POND	SIDNEY
LILY POND	NEW GLOUCESTER
LITTLE COBBOSSEE	WINTHROP
LITTLE DUCK POND	WINDHAM
LITTLE MEDOMAK POND	WALDOBORO
LITTLE OSSIPEE	WATERBORO
LITTLE POND	DAMARISCOTTA
LITTLE PURGATORY POND	MONMOUTH
LITTLE SABATTUS	GREENE

LITTLE SEBAGO LAKE	WINDHAM
LITTLE TOGUS POND	AUGUSTA
LITTLE WATCHIC POND	STANDISH
LITTLE WILSON POND	TURNER
LONG LAKE	BRIDGTON
LONG POND	MOUNT DESERT
LONG POND	BUCKSPORT
LONG POND	SULLIVAN
LOON POND	SABATTUS
LOON POND	LITCHFIELD
LOVEJOY POND	ALBION
LOWER AND UPPER PONDS	SKOWHEGAN
LOWER HADLOCK POND	MOUNT DESERT
LOWER NARROWS POND	WINTHROP
LOWER RANGE POND	POLAND
MACES POND	ROCKPORT
MANSFIELD POND	HOPE
MARANACOOK LAKE	WINTHROP
MARSHALL POND	OXFORD
MCGRATH POND	OAKLAND
MEDOMAK POND	WALDOBORO
MEGUNTICOOK LAKE	LINCOLNVILLE
MIDDLE BRANCH POND	ALFRED
MIDDLE RANGE POND	POLAND
MIRROR LAKE	ROCKPORT
MOODY POND	LINCOLNVILLE
MOODY POND	WATERBORO
MOOSE HILL POND	LIVERMORE FALLS
MOOSE POND	OTISFIELD
MOUNT BLUE POND	AVON
MOUSAM LAKE	SHAPLEIGH
MUD POND	WINSLOW
MUD POND	CHINA
MUD POND	WINDSOR
MUD POND	OXFORD
MURDOCK POND	BERWICK
NEQUASSET POND	WOOLWICH
NICHOLS POND	SWANVILLE
NO NAME POND	LEWISTON
NOKOMIS POND	NEWPORT
NORTH POND	NORWAY
NORTH POND	SUMNER
NORTH POND	SMITHFIELD
NORTON POND	LINCOLNVILLE
NOTCHED POND	RAYMOND
NUBBLE POND	RAYMOND
OAKS POND	SKOWHEGAN
OTTER POND	BRIDGTON
OTTER PONDS #2	STANDISH
PANTHER POND	RAYMOND
PARADISE POND	DAMARISCOTTA
PARKER POND	CASCO
PARKER POND	JAY
PARKER POND	LYMAN
PATTEE POND	WINSLOW
PATTEN POND	HAMPDEN
PEMAQUID POND	WALDOBORO
PENNESSEEWASSEE	NORWAY
PETINGILL POND	WINDHAM
PLEASANT POND	TURNER
PLEASANT POND (X)	RICHMOND
POVERTY POND	NEWFIELD
QUIMBY POND	RANGELEY
RAYMOND POND	RAYMOND
RICH MILL POND	STANDISH
ROBERTS WADLEY POND	LYMAN
ROCKY POND	ROCKPORT
ROUND POND	RANGELEY
RUNAROUND POND	DURHAM
SABATTUS POND (X)	GREENE
SABBATHDAY LAKE	NEW GLOUCESTER
SALMON L (ELLIS P)	BELGRADE
SALMON STREAM POND	GUILFORD
SAND POND	MONMOUTH
SAND POND	LIMINGTON
SANDY BOTTOM POND	TURNER
SANDY POND	FREEDOM
SAWYER POND	GREENVILLE
SCITUATE POND	YORK
SEBAGO LAKE	SEBAGO
SEBASTICOOK LAKE	NEWPORT
SECOND POND	DEDHAM
SEWALL POND	ARROWSIC
SHAKER POND	ALFRED
SHERMAN LAKE	NEWCASTLE
SHY BEAVER POND	SHAPLEIGH
SILVER LAKE	BUCKSPORT
SPECTACLE POND	VASSALBORO
STARBIRD POND	HARTLAND
SWAN POND	LYMAN
SWETTS POND	ORRINGTON
SYMMES POND	NEWFIELD
TAYLOR POND	AUBURN
THOMAS POND	CASCO
THOMPSON LAKE	OXFORD
THREECORNERED POND	AUGUSTA
THREEMILE POND (X)	WINDSOR
TOGUS POND	AUGUSTA
TOLMAN POND	AUGUSTA
TOOTHAKER POND	PHILLIPS
TRAVEL POND	JEFFERSON
TRICKEY POND	NAPLES
TRIPP POND	POLAND
TYLER POND	MANCHESTER
UNITY POND	UNITY
UPPER NARROWS POND	WINTHROP
UPPER RANGE POND	POLAND
WADLEY POND	LYMAN
WARD POND	SIDNEY
WARDS POND	LIMINGTON
WARREN POND	SOUTH BERWICK
WASSOOKEAG LAKE	DEXTER
WATCHIC POND	STANDISH
WEBBER POND (X)	VASSALBORO
WEST GARLAND POND	GARLAND
WEST HARBOR POND	BOOTHBAY HARBOR
WHITES POND	PALMYRA
WHITNEY POND	OXFORD
WHITTIER POND	ROME
WILEY POND	BOOTHBAY

WILSON POND	WAYNE
WOOD POND	BRIDGTON
WOODBURY POND	MONMOUTH
WORTHLEY POND	POLAND
YORK POND	ELIOT
YOUNGS LAKE	WESTFIELD

APPENDIX B

Urban impaired streams

STREAM	TOWN
BOBBIN MILL BROOK	AUBURN
LOGAN BROOK	AUBURN
~~UNNAMED TRIBUTARY TO BOND BROOK (entering below I-95)~~	~~AUGUSTA~~
UNNAMED TRIBUTARY TO BOND BROOK (entering below I-95)	AUGUSTA
PENJAJAWOC STREAM, including MEADOW BROOK	BANGOR
BIRCH STREAM (OHIO STREET)	BANGOR
UNNAMED BROOK (PUSHAW ROAD)	BANGOR
ARCTIC BROOK (VALLEY AVENUE)	BANGOR
SHAW BROOK	BANGOR, HAMPDEN
MARE BROOK	BRUNSWICK
UNNAMED TRIBUTARY TO ANDROSCOGGIN RIVER (near Jordan Avenue)	BRUNSWICK
UNNAMED TRIBUTARY TO ANDROSCOGGIN RIVER (near River Road)	BRUNSWICK
UNNAMED TRIBUTARY TO ANDROSCOGGIN RIVER (near Water Street)	BRUNSWICK
CARIBOU STREAM	CARIBOU
FROST GULLY BROOK	FREEPORT
CONCORD GULLY	FREEPORT
DILL BROOK	LEWISTON
JEPSON BROOK	LEWISTON
BROWN BROOK	LIMERICK
MATTANAWCOOK STREAM	LINCOLN
UNNAMED STREAM (Route 196)	LISBON FALLS
CAPISIC BROOK	PORTLAND
FALL BROOK	PORTLAND
NASONS BROOK	PORTLAND
GOOSEFARE BROOK	SACO
~~MOUSAM RIVER~~	~~SANFORD~~
~~TROUT BROOK~~	~~SOUTH PORTLAND~~
TROUT BROOK (including KIMBALL BROOK)	SOUTH PORTLAND
BARBERRY CREEK	SOUTH PORTLAND
LONG CREEK	SOUTH PORTLAND
PHILLIPS BROOK	SCARBOROUGH
RED BROOK	SCARBOROUGH, SOUTH PORTLAND
~~WITTEN BROOK~~	~~SKOWHEGAN~~
WHITTEN BROOK	SKOWHEGAN
UNNAMED TRIBUTARY TO ANDROSCOGGIN RIVER (near Topsham Fair Mall)	TOPSHAM
MILL STREAM	WINTHROP

(1) Rivers, Streams or Brooks Most at Risk from Development

Waterbody	Municipality or Area Served by Public Water Supply
Chapman Brook	Bethel
Petite Brook	St. Francis

(2) Sensitive or threatened regions or watersheds

Stoney Brook	Andover
Salmons Falls River	Berwick
Saco River	Biddeford-Saco Area
Aroostook River	Caribou
Aunt Hanna Brook	Dixfield
Pattee Brook	Fort Fairfield
Branch Brook	Kennebunk, Kennebunkport, Wells
Silver Spring Brook	Limestone
Limestone Stream	Limestone
Little Madawaska River	U.S. Air Force – Loring
Sebec River	Milo
St. John River	Madawaska
Presque Isle Stream	Presque
Kennebec River	Skowhegan
Quarry Hill Brook	Waldoboro

APPENDIX C

Coastal Wetlands Most at Risk from New Development

Small Estuaries, Tidal Rivers, and Bays

Spruce Creek (All)
Sections of Kittery and Eliot which are within the watershed of the tidal and freshwater segments of Spruce Creek inland of the Rte. 103 bridge between Kittery and Kittery Point.

Ogunquit River (All)
The sections of Ogunquit, Wells, York, and South Berwick which are encompassed within the watershed of the tidal and freshwater segments of the Ogunquit River and its tributaries inland from the mouth of the Ogunquit Estuary.

Scarboro Estuary System (All)
The sections of Scarborough, Old Orchard Beach, South Portland, Gorham, and Saco that are within the watershed of the tidal and freshwater segments of the Scarboro River inland from its junction with Saco Bay at Pine Point plus all its tributaries including, but not limited to, the Nonesuch River, the Libby River, and Jones Creek.

New Meadows River (Excluding waters west of Gurnet Strait and Rte. 24)
The sections of Phippsburg, Harpswell, West Bath, Bath and Brunswick within the watershed of the tidal and freshwater segments of the New Meadows River inland from its junction with Casco Bay at Fort Point plus all its tributaries, but excluding the tidal waters that lie west of the Rte. 24 Bridge at Gurnet Strait.

Medomak River (Segment)
The section of Waldoboro that is within the watershed of the tidal and freshwater segments of the Medomak River and its tributaries, inland of a line between the northern end of Jones Neck and Havener Point and south of Winslows Mills.

St. George River (Segment)
The sections of Cushing, St. George, South Thomaston, Thomaston, Rockland, and Warren, that are within the watershed of the tidal and freshwater segments of the St. George River inland of a line connecting Bailey Point in Cushing to Watts Point in St. George and downstream of the outlets of south pond, White Oak Pond, and Chickawaukie Lake plus all the St. George River's tributaries within this area including, but not limited to, the Oyster River and Mill Creek.

Weskeag River (All)
The sections of South Thomaston, Owls Head, Thomaston, and Rockland that are within the watershed of the tidal and freshwater segments of the Weskeag River inland from its confluence with Penobscot Bay at Spaulding Island plus all the Weskeag's tributaries.